

28. A method of producing a therapeutic agent comprising the steps of the method of any one of claims 25 to 27; and
- (i) synthesizing the compound obtained or identified in step (b) or an analog or derivative thereof in an amount sufficient to provide said agent in a therapeutically effective amount to a patient; and/or
 - (ii) combining the compound obtained or identified in step (b) or an analog or derivative thereof with a pharmaceutically acceptable carrier
29. An activator/agonist or inhibitor/antagonist of phosphate metabolism or binding partner of phosphatonin obtained by the method of any one of claims 25 to 27.
30. A composition comprising a polypeptide of any one of claims 1 to 6, or 15 to 18, the polynucleotide of any one of claims 7 to 10, a vector of claim 11, an antibody of claim 19, the nucleic acid molecule of claim 20 or the activator/agonist, inhibitor/antagonist or binding partner of claim 29.
31. The composition of claim 30 which is a pharmaceutical composition and further comprises a pharmaceutically acceptable excipient, diluent or carrier.
32. The composition of claim 31 which is a diagnostic composition and further comprises means for detection.
33. Use of a polypeptide of any one of claims 1 to 6 or 15 to 18 or a DNA encoding and capable expressing said polypeptide or the activator/agonist, binding partner of claim 29 or the antibody of claim 19, for the preparation of a medicament for treatment of a disorder of phosphate metabolism.
34. Use of a polypeptide of any one of claims 1 to 6 or 15, 16 or 18 or a DNA encoding and capable expressing said polypeptide, the activator/agonist or binding partner of claim 29 or the antibody of claim 19, for the preparation of a medicament for the treatment of hyperphosphatemia.
35. Use of a polypeptide of any one of claims 1 to 6, 15, 16 or 18 or a DNA encoding and capable expressing said polypeptide or the activator/agonist,

binding partner of claim 29 or the antibody of claim 19, for the preparation of a medicament for the treatment of renal osteodystrophy, hyperphosphatemia in renal dialysis/pre-dialysis, secondary hyperparathyroidism or osteitis fibrosa cystica.

36. Use of a polypeptide of any one of claims 1 to 6, 15, 17 or 18 or a DNA encoding and capable expressing said polypeptide, the antibody of claim 19, the nucleic acid molecule of claim 20 or the inhibitor/antagonist of claim 29, for the preparation of a medicament for the treatment of hypophosphatemia.
37. Use of a polypeptide of any one of claims 1 to 6, 15, 17 or 18, or a DNA encoding and capable expressing said polypeptide, the antibody of claim 19, the nucleic acid molecule of claim 20 or the inhibitor/antagonist of claim 29, for the preparation of a medicament for the treatment of X-linked hypophosphatemic rickets, hereditary hypophosphatemic rickets with hypercalcuria (HHRH), hypomineralised bone lesions, stunted growth in juveniles, oncogenic hypophosphatemic osteomalacia, renal phosphate leakage, renal osteodystrophy, osteoporosis, vitamin D resistant rickets, end organ resistance, renal Fanconi syndrome, autosomal rickets, Paget's disease, kidney failure, renal tubular acidosis, cystic fibrosis or sprue.
38. Use of a polypeptide of any one of claims 1 to 6, 15, 17 or 18, or a DNA encoding and capable expressing said polypeptide, the antibody of claim 19, the nucleic acid molecule of claim 20 or the inhibitor/antagonist of claim 29, for the manufacture of a medicament for the treatment of a bone mineral loss disorder.
39. Use of a polypeptide of any one of claims 1 to 6, 15, 17 or 18 and PHEX metalloproteinase for the manufacture of a combined preparation for simultaneous, separate or sequential use for the treatment of a disorder of phosphate metabolism.
40. Use of a transformed osteoblast or bone cell line capable of phosphatonin overexpression for the production of phosphatonin.

[illegible]